

LIGHT COLOR RECOGNITION FOR OPTICAL CONNECTION VERIFICATION

Abstract of the Disclosure

5 Optical connection verification schemes that do not cause electromagnetic
interference. An all-optical connection verification scheme exploits optical coding based
on a standard color scale such as RGB (red, green, blue). An RGB LED source is used to
launch a three-color optical signal where the relative (or absolute) magnitudes of the
color components identify the connection. On the receiver end, an RGB photodiode
10 measures the relative (or absolute) magnitudes of the color components to verify the
connection. Alternatively, one end of the connection may transmit white light with the
other end reflecting back a similar three-color signal by use of a color-coded panel
reflector.